Approved for use through 04/30/2003. OMB 0651-0032 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Panerwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid DMR control number

Application Number Filing Date First Named Inventor FANAKA, AKIRA Examiner Name Application Number Filing Date First Named Inventor FANAKA, AKIRA Examiner Name Art Unit Application Number August 19, 2003 First Named Inventor FANAKA, AKIRA Examiner Name Art Unit Art Unit Art Unit Art Unit Application Number August 19, 2003 First Named Inventor FANAKA, AKIRA Examiner Name Art Unit Application Number August 19, 2003 First Named Inventor TANAKA, AKIRA Examiner Name Art Unit Application Number August 19, 2003 First Named Inventor TANAKA, AKIRA Examiner Name Art Unit Attorney Docket No. 500.43031X00 FEE CALCULATION (continued) 3. ADDITIONAL FEES Large Fee Fee Fee Fee Fee Fee Fee Fee Fee Fe	CCC TO A MONITTA	-	T			Complete i	f Known		
## Filing Date Agust 19, 2003 First Named Inventor TANAKA, AKIRA Applicant claims small entity status. See 37 CFR 1.27 Art Unit	FEE TRANSMITTAL			ation N	Number				
Applicant claims small entity status, See 37 CFR 1.27	for FY 2003					August 19.	2003		
Effective 01/01/2003 Patent fees are subject to annual revision. Art Unit					Invento				
□ Applicant daims small entity status. See 3 CFR 1.27 TOTAL AMOUNT OF PAYMENT (check all that apply) □ Check © Credit Card □ Money Order □ Other □ None □ Deposil Account Number 01:2135 □ Deposil A	5%-4%-04/04/0000 P-4-45					, Tracracy, A	NIO.		
TOTAL AMOUNT OF PAYMENT (check all that apply)	Effective 01/01/2003. Patent fees are subject to annual revision.								
METHOD OF PAYMENT (check all that apply)	Applicant claims small entity status. See 37 CFR 1.2	7							
Check Credit Card Money Order Other None Superior Other None Superior Other None Superior Other Other None Superior Other	TOTAL AMOUNT OF PAYMENT (\$) 790.00		Attorr	ey Do	cket No.	500,43031X	00		
Deposit Account Number 01-2135 Annual III Terry, Stout & Kraus, LLP The Commissioner authorized to Check all that apply) Charge fees indicated below © Credit any overpayments Scharge any additional fee(s) during the pendency of this application Charge fees indicated below, except for the filling fee 1052 30 2052 205 2052 205 2052 205 2052 205 2052 205 2052 205	METHOD OF PAYMENT (check all that apply)				FE	E CALCULATIO	N (continued)		
Entity Per Paid Per P	☐ Check ☑ Credit Card ☐ Money Order ☐ Other ☐ None	3.							
Deposit Account Namber 01-2135 Deposit Account Namber 01-2135 Deposit Account Namber Antonelli, Terry, Stout & Kraus, LLP The Commissioner authorized to: (check all that apply) Charge fees indicated below	☑ Deposit Account:	l.	Enti	ty	Entity				1
Deposit Account Name Antonelli, Terry, Stout & Kraus, LLP The Commissioner authorized to: (check all that apphy) The Commissioner authorized to: (check all that apphy) Charge fees indicated below BG credit any overpayments Charge fees indicated below, except for the filling fee application □ Charge fees indicated below, except for the filling fee to the above-identified deposit account. FEE CALCULATION 1. BASIC FILING FEE Large Entity Small Entity Fee Fee Fee Fee Fee Fee Fee Peald 1001 759 2001 373 Utility filing fee 11002 330 2002 165 Design filing fee 11003 520 2003 250 Plant filing fee 11005 180 2005 80 Provisional filing fee fee Peald 11005 180 2005 80 Provisional filing fee fee Peald 11005 180 2005 80 Provisional filing fee fee Peald 11005 180 2005 80 Provisional filing fee fee Peald 11005 180 2005 80 Provisional filing fee fee Peald 11005 180 2005 80 Provisional filing fee fee Peald 11005 180 2005 80 Provisional filing fee fee Peald 11005 180 2005 80 Provisional filing fee fee Peald 11005 180 2005 80 Provisional filing fee fee Peald 11005 180 2005 80 Provisional filing fee fee Peald 11005 180 2005 80 Provisional filing fee fee Peald 11005 180 2005 80 Provisional filing fee fee Peald 11005 180 2005 80 Provisional filing fee fee Peald 11005	Deposit Account Number 01-2135					Fee Descri	otion	Fee	Paid
Charge fees indicated below E Credit any overpayments 1052 50 50 50 50 50 50 50		I P				· ·			
□ Charge fees indicated below □ Cedit any overpayments Charge any additional feets Unity of the filling fee to the above-identified deposit account. 1. BASIC FILING FEE Large Entity Small Entity Fee Fee Fee Fee Pade Code (\$) C							-		
103 130 105 130 105 130 105 130 105 130 105 130 105 130 105 130 105 130 105 130 105 130 105 130 105 130 105 130 105 130 105 130 130 105 130	☐ Charge fees indicated below ☐ Credit any overpayments			2052	∠5		visional filing fee o	OI.	្តជ
The above-identified deposit account.		10	53 130	1053	130	Non-English specific	ation		21
Examination action					•		· ·	nination	
1. BASIC FILING FEE Large Entity Small Entity Fee Fe		18	04 920	1804	920*		on of SIR prior to		O.S.
Large Entity Small Entity Fee Fe				0* 1805	1,840		on of SIR after		- 7
Fee			E4 440	2054			ithin first manth		91
1001 750 2001 375 Utility filling fee 1253 930 2253 465 Extension for reply within third month 1003 520 2003 260 Plant filing fee 1255 1,970 2255 855 Extension for reply within fifth month 1004 750 2004 375 Reissue filing fee 1401 320 2401 160 Notice of Appeal 1401 320 2401 160 Notice of Appeal 1402 320 2402 160 Filling a brief in support of an appeal 1402 320 2402 160 Filling a brief in support of an appeal 1402 2402 160 Filling a brief in support of an appeal 1402 2402 160 Filling a brief in support of an appeal 1402 2402 160 Filling a brief in support of an appeal 1402 2403 140 Request for oral hearing 1402 2403 140 Request for real hearing 1402 2403 140 Request for real hearing 1403 280 2403 140 Request for real hearing 1402 2402 255 Petition to revive – unavoidable 1403 1403 2403 2403 2403 2403 2404 240 28	Fee Fee Fee Fee Description Fee Paid	- I						th	8
1002 330 2002 165 Design filing fee 1254 1,450 2254 725 Extension for reply within fourth month 1003 520 2003 260 Plant filing fee 1255 1,970 2255 985 Extension for reply within firth month 1401 320 2401 160 Notice of Appeal 1401 320 2402 160 Plining a brief in support of an appeal 1401 320 2402 160 Plining a brief in support of an appeal 1401 1402 230 2402 160 Plining a brief in support of an appeal 1401 1402 230 2402 160 Plining a brief in support of an appeal 1401 1402									
1003 520 2003 260 Plant filing fee 1255 1,970 2255 985 Extension for reply within fifth month 1401 320 2401 160 Notice of Appeal 1402 320 2402 160 Filing a brief in support of an appeal 1402 320 2402 160 Filing a brief in support of an appeal 1403 280 2403 140 Reguest for oral hearing 1405 1,510 Petition to Institute a public use proceeding 1451 1,510 1451 1,510 Petition to revive – unavoidable 1452 110 2452 55 Petition to revive – unavoidable 1453 1,300 2453 650 Petition to revive – unavoidable 1453 1,300 2453 650 Petition to revive – unavoidable 1501 1,300 2501 650 Utility issue fee (or reissue) 1501 1,300 2501 650 Utility issue fee (or reissue) 1466 130 1460 130 Petitions to the Commissioner 1466 130 1460 130 Petitions of Information Disclosure Strnt 1466 1	• •					, ,		,	
1004 750 2004 375 Reissue filing fee 1401 320 2401 160 Notice of Appeal 1402 320 2402 160 Filing a brief in support of an appeal 1402 320 2402 160 Filing a brief in support of an appeal 1402 320 2403 140 Request for oral hearing 1401 1402 1	, ,							•	
1005 160 2005 80 Provisional filing fee SUBTOTAL (1) 750.00 1403 280 2402 160 Filing a brief in support of an appeal 1402 320 2402 160 Filing a brief in support of an appeal 1403 280 2403 140 Request for oral hearing 1405 1406 Request for oral hearing 1406 1407									ľ
SUBTOTAL (1) 750.00 1403 280 2403 140 Request for oral hearing 1451 1,510 1451 1,510 Petition to revive — unavoidable 1452 110 2452 55 Petition to revive — unavoidable 1453 1,300 2453 650 Petition to revive — unintentional 1501 1,300 2453 650 Petition to revive — unintentional 1501 1,300 2501 650 Utility issue fee (or reissue) 1502 470 2502 235 Design issue fee 1503 630 2503 315 Plant issue fee 1503 Plant issue fee 1503 1503 Plant issue fee 1503 P	-			_		• •	ort of an appeal		
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE Fee from below Fee Pald 1453 1,510 2452 55 Petition to revive – unavoidable 1453 1,300 2453 650 Petition to revive – unavoidable 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintentional 1453 1,300 2453 650 Petition to revive – unintention to the correct of the petition to revive – unintention to the correct of the petition to revive – unintention to the correct of the petition to revive – unintention to the correct of the petition to revive – unintention to the correct of the petition to revive – unintention to rev		1							96
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	OUDIOTAL (I)					•	-	edina	
Extra Claims					•			3	
Total Claims 18 -20** = 0 x 18 = 0 1501 1,300 2501 650 Utility issue fee (or reissue) Indep. 3 -3** = 0 x 84 = 0 1502 470 2502 235 Design issue fee Multiple Dependent		14	53 1,30	0 2453	650	Petition to revive - u	nintentional		
Indep. 3 -3** = 0 x 84 = 0 Claims Multiple Dependent 280 = 0 1502 470 2502 235 Design issue fee 1503 630 2503 315 Plant issue fee Multiple Dependent 280 = 0 1406 130 1460 130 Petitions to the Commissioner 1807 50 1807 50 Processing fee under 37 CFR 1.17(q) 1806 180 1806 180 Submission of Information Disclosure Strnt Fee Fee Fee Fee Fee Fee Fee (\$\frac{1}{2}\text{Pee} \text{Fee Description}}{\frac{1}{2}\text{Code}} \text{Code} (\$\frac{1}{3}\text{Code} \text{Code} \text{Code} \text{Code} (\$\frac{1}{3}\text{Code} \text{Code} \text{Code} \text{Code} \text{Code} (\$\frac{1}{3}\text{Code} \text{Code} \text{Code} \text{Code} \text{Code} (\$\frac{1}{3}\text{Code} \text{Code} \text{Code} \text{Code} \text{Code} \text{Code} \text{Code} (\$\frac{1}{3}\text{Code} \text{Code} Co		15	01 1,30	0 2501	650	Utility issue fee (or re	eissue)		
Claims Multiple Dependent 280 = 0 1503 630 2503 315 Plant issue fee Multiple Dependent 280 = 0 1406 130 1460 130 Petitions to the Commissioner 1807 50 1807 50 Processing fee under 37 CFR 1.17(q) Submission of Information Disclosure Stmt 8021 40 8021 40 Recording each patent assignment per properties) 1202 18 2202 9 Claims in excess of 20 1201 84 2201 42 Independent claims in excess of 3 1203 280 2203 140 Multiple dependent claims in excess of 3 1204 84 2204 42 "Reissue independent claims over original patent over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent SUBTOTAL (2) \$ 0.00 **or number previously paid, if greater, For Reissues, see above. 1508 630 2503 315 Plant issue fee 1406 130 1460 130 Petitions to the Commissioner 1807 50 1807 50 Processing fee under 37 CFR 1.17(q) Submission of Information Disclosure Stmt 8021 40 8021 40 Recording each patent assignment per properties) 1809 750 2809 375 Filing a submission after final rejection (37 CFR § 1.129(a)) 1810 750 2810 375 For each additional invention to be examined (37 CFR § 1.129(b)) 1810 750 2810 375 Request for Continued Examination (RCE) 1809 750 2810 375 Request for expedited examination of a design application 1810 750 2801 375 Request for expedited examination of a design application 1810 750 2801 375 Request for expedited examination of a design application 1810 750 2801 375 Request for expedited examination of a design application 1810 750 2801 375 Request for expedited examination of a design application 1810 750 2801 375 Request for expedited examination of a design application 1810 750 2801 375 Request for expedited examination of a design application 1810 750 2801 375 Request for expedited examination of a design application 1810 750 2801 375 Request for expedited examination of a design application 1810 750 2801 375 Request for expedited examination of a design application 1810 750 2801 375 Request for expedited examination of a design application		15	02 470	2502	235	Design issue fee			
Large Fee Fee Fee Fee Fee Fee Pee Fee Fee Fe		15	03 630	2503	315	Plant issue fee			
Large Fee Fee Fee Fee Fee Fee Fee Fee Fee F	Multiple Dependent 280 = 0	14	06 130	1460	130	Petitions to the Com	missioner		
Fee Code (\$)		18	07 50	1807	50	Processing fee unde	r 37 CFR 1.17(q)		
Code (\$) Code (\$) Code (\$) Claims in excess of 20 1201 84 2201 42 Independent claims in excess of 3 1203 280 2203 140 Multiple dependent claims over original patent over original patent sover original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent SUBTOTAL (2) \$ 0.00 **Tor number previously paid, if greater; For Reissues, see above. 8021 40 8021 40 Recording each patent assignment per property (times number of property (37 CFR § 1.129(a)) 1810 750 2801 375 Filing a submission after final rejection (37 CFR § 1.129(a)) 1810 750 2810 375 For each additional invention to be examined (37 CFR § 1.129(a)) 1810 750 2810 375 For each additional invention to be examined (37 CFR § 1		18	06 180	1806	180	Submission of Inform	nation Disclosure	Stmt	
1201 84 2201 42 Independent claims in excess of 3 1203 280 2203 140 Multiple dependent claims over original patent over original patent 1205 18 2205 9 **Reissue claims in excess of 20 and over original patent SUBTOTAL (2) \$ 0.00 **or number previously paid, if greater; For Reissues, see above. 1809 750 2809 375 Filing a submission after final rejection (37 CFR § 1.129(a)) 1810 750 2810 375 For each additional invention to be examined (37 CFR § 1.129(b)) 1801 750 2801 375 Request for Continued Examination (RCE) 1802 900 1802 900 Request for expedited examination of a design application Other fee (specify) **Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 40.00 SUBMITTED BY Complete (if applicable)	Code (\$) Code (\$)	80	21 40	8021	40				00
1203 280 2203 140 Multiple dependent claim, if not paid 1810 750 2810 375 For each additional invention to be examined (37 CFR § 1.129(b)) 1204 84 2204 42 "* Reissue independent claims over original patent over original patent 1205 18 2205 9 "* Reissue claims in excess of 20 and over original patent SUBTOTAL (2) \$ 0.00 **or number previously paid, if greater, For Reissues, see above. SUBMITTED BY 1810 750 2810 375 For each additional invention to be examined (37 CFR § 1.129(b)) 1801 750 2801 375 Request for Continued Examination (RCE) 1802 900 1802 900 Request for expedited examination of a design application Other fee (specify) *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 40.00 *Complete (if applicable)		18	09 750	2809	375	Filing a submission a	after final rejection		
1204 84 2204 42 ** Reissue independent claims over original patent solution of a design application of	· ·	18	10 750	2810	375	For each additional i	nvention to be		
over original patent 1802 900 1802 900 Request for expedited examination of a design application 1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent SUBTOTAL (2) \$ 0.00 **or number previously paid, if greater, For Reissues, see above. SUBMITTED BY Registration No.	1204 84 2204 42 ** Reissue indenendent claims	18	01 750	2801	375	-		RCE)	
**Complete (if applicable) **Reissue claims in excess of 20 and over original patent SUBTOTAL (2) \$ 0.00 **Or number previously paid, if greater, For Reissues, see above. *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 40.00 SUBMITTED BY *Registration No.		1				Request for expedite	ed examination	,	
SUBTOTAL (2) \$ 0.00 **or number previously paid, if greater; For Reissues, see above. *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 40.00 SUBMITTED BY *Registration No.		Ott	her fee (s	pecify)		or a design application	on		
SUBMITTED BY Registration No. Reduced by Basic Filing Fee Paid SUBTUTAL (3) (\$) 40.00 Complete (if applicable) Registration No.				• • • •					
Registration No.	▼or number previously paid, if greater; For Reissues, see above.	·R	educed b	y Basic I	Filing Fee	Paid	SUBTOTAL	(3) (\$) 40.0	0
	SUBMITTED BY					Complete (if a	pplicable)		
to the second control of the second control	Name (Print/Type) James N. Dresser				22 9	973	Telephone	703-312 <i>-</i> 6600	ď
Signature Date August 19, 2003	222								

WARNING: Information on this form may become public. Credit card information should not be included on this form Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231. ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

UTILITY PATENT APPLICATION TRANSMITTAL (Only for new popprovisional applications under 37 CFR 1 53(b))		Attorney Do	ocket No.	500.43031X00					
		First Invent	or	TANAKA, AKIRA					
		Title		FUEL CELL					
				FOEL CELL					
		Express Ma	il Label No.	M-11 01 - 5 - 1	A A a selle a Alexa				
APPLICATION ELEMENTS SEE MPEP chapter 600 concerning utility patent application contents.			ADDRESS TO: Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria VA 22313-1450						
1. E Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing) 2. Applicant claims small entity status. See 37 CFR 1.27.			CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)						
			Nucleotide and/or Amino Acid Sequence Submission fif applicable, all necessary) a. Computer Readable Form (CRF)						
Specification (preferred arrangement set forth below)	[Total Pages: 23]		·	ion Sequence Listing on:					
-Descriptive title of the invention				i D CD-ROM or CD-R (2 copies); or					
-Cross Reference to Related / -Statement Regarding Fed sp	onsored R & D		ii ☐ paper						
 -Reference to sequence listing, a table, or a computer program listing appendix 			c. Statements verifying identity of above copies						
 Background of the Invention Brief Summary of the Invention 	on		ACCOMPANYING APPLICATION PARTS						
-Brief Description of the Drawings (if filed) -Detailed Description			Assignment Papers (cover sheet & documents(s))						
-Claim(s)-Abstract of the Disclosure				FR 3.73(b) Statement en there is an assignee)	Power of Attorney				
4. Drawing(s) (35 U.S.C. 113)	[Total Pages: 4]		1 — `	ish Translation Docume					
5. Oath or Declaration	[Total Pages: 3]			mation Disclosure Copies of IDS Citations					
a Newly executed (original or o	, , ,		Statement (IDS)/PTO-1449 13. Preliminary Amendment						
b Copy from a prior application (for continuation/divisional			14. Return Receipt Postcard (MPEP 503)						
i. DELETION OF INVENTOR(S)			(Should be specifically itemized) 15. Certified Copy of Priority Document(s)						
Signed statement attached deleting inventor(s)			(if foreign priority is claimed)						
Named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b)			16. Monpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35						
6. Application Data Sheet. See 37 CFR 1.76			or its equivalent. 17. Other: Figs. 1-8, Credit Card Payment Form.						
			Information Disclosure Sheet Under 37 CFR 1.56 w/refs.						
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) of prior application No.:									
L_ Continuation L_ Divisional L_ Continuation-in-part (CIP) of prior application No.: Prior application information: Examiner: Art Unit:									
For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.									
19. CORRESPONDENCE ADDRESS									
Customer Number	020457			OR _	Correspondence address below				
Name ANTONELLI, TERRY, STOUT & KRAUS, LLP									
Address									
City		State		Zip					
Country		Telephone	(703) 312-6600	Code Fax	(703) 312-6666				
					22,973				
Signature Date August 19, 2003									

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.